CLAIMS LISTING:

1 – 7. (Cancelled)

8. (Currently amended) A method for manufacturing a composite layer structure from at least one first and at least one second cover sheet (1, 2) between which a core sheet (30) is provided which comprises a composition of fibers (9) and adhesive (5), characterized in the following steps:

(a1) applying the adhesive (5) onto the at least one first and the at least one second cover sheet (1; 2);

(b1) applying the fibers (9) onto areas coated with the adhesive (5) of at least one of the cover sheets (1, 2), wherein locally varying physical properties of the composite layer structure ~~can be~~ are achieved by applying the adhesive (5) onto predetermined specific areas of the cover sheets (1; 2) [[and]] or by applying the fibers (9) of varying kind depending on at least one of density, ~~and~~ thickness, ~~and~~ length, ~~and~~ material, and orientation relative to the cover sheets of the fibers; and

(c1) joining together the cover sheets (1, 2).

9. (Currently amended) A method for manufacturing a composite layer structure from at least one first and at least one second cover sheet (1, 2) between which a core sheet (30) is provided which comprises a composition of fibers (9) and adhesive (5), characterized in the following steps:

(a2) applying a mixture of fibers (9) and adhesive (5) onto at least one of the at least one first and the at least one second cover sheet (1, 2), wherein locally varying physical properties of the composite layer structure ~~can be~~ are achieved by locally applying the mixture only onto predetermined areas of the at least one first and the at least one second cover sheets (1; 2); and

(b2) joining together the at least one first and the at least one second cover sheets (1, 2).

10. (Currently amended) The method as recited in either of claims 8 or 9, wherein the steps (al) and (a2), respectively, are executed with a screen printing ~~like~~ method.

11. (Original) The method as recited in either of claims 8 or 9, wherein the adhesive (5) and the mixture of fibers (9) and adhesive (5), respectively, is applied by spraying.

12. (Original) The method as recited in either of claims 8 or 9, wherein the adhesive (5) is foaming and is applied substantially in the form of dots.

13. (Original) The method as recited in either of claims 8 or 9, wherein the adhesive (5) and the mixture of fibers (9) and adhesive (5), respectively, is applied in a non continuous layer, in order to at least substantially avoid inherent stresses due to different thermal expansion coefficients of the cover sheets (1, 2).

14. (Currently amended) The method as recited in either of claims 8 or 9, wherein any of the steps (al) and (b1) and (a2), respectively, are executed such that the composite layer structure remains free of adhesive (5) and fibers (9) and of the mixture of fibers (9) and adhesive (5), respectively, at least in an area in which it is ~~machined by welding, cutting, buckling, bending or in a similar way~~ to be processed by machining.

15 – 16. (Cancelled)

17. (Original) The method as recited in either of claims 8 or 9, wherein before applying the fibers (9) the adhesive (5) is given a viscosity by heating which is suitable for the penetration of the fibers (9).

18. (Original) The method as recited in either of claims 8 or 9, wherein a mixture of metallic and non-metallic fibers (9) is applied in order to achieve a desired electrical conductivity between the cover sheets (1, 2).

19. (Original) The method as recited in either of claims 8 or 9, wherein the fibers (9) are applied in the form of a positive/negative pattern onto the cover sheets (1, 2).

20. (Original) The method as recited in either of claims 8 or 9, wherein during or immediately after applying the fibers (9) a steady or swirled stream of air is directed onto the fibers (9) in order to obtain a non perpendicular and inordinate orientation of the fibers (9).

21. (Original) The method as recited in either of claims 8 or 9, wherein for curing the adhesive (5) and the mixture of fibers (9) and adhesive (5), respectively, at least two steps are provided which serve for pre-curing and final curing.

22. (Original) The method as recited in either of claims 8 or 9, wherein the fibers (9) are deposited on a carrier (91), that the carrier is put onto at least one cover sheet (1; 2) and that the fibers (9) are then adhered to the at least one cover sheet (1; 2).

23. (Original) The method as recited in claim 22, wherein the carrier (91) is removed after adhering the fibers at one of the cover sheets (1, 2).

24. (Previously presented) A method for manufacturing a composite layer structure from at least one first and at least one second cover sheet (1, 2) between which a core sheet (30) is provided which comprises a composition of fibers (9) and adhesive (5), characterized in the following steps:

(al) applying a non-continuous layer of adhesive (5) to areas on the at least one first cover sheet;

(b1) applying the fibers (9) to the areas coated with the non-continuous layer to form the core sheet (30); and

(c1) laminating the at least one second cover sheet (2) to the core sheet (30).

25. (Previously presented) The method as recited in claim 24, wherein the composite layer structure from step (c1) includes channels suitable for guiding liquid or gaseous media.

26. (Previously presented) The method as recited in claim 24, wherein the non-continuous layer has a pattern selected from the group consisting of polygons, spirals, serpentines, rectangles, circles, dots, ellipses, stars, and crosses and combinations thereof.